

Title (en)
SEMICONDUCTOR DEVICE

Title (de)
HALBLEITERBAUELEMENT

Title (fr)
DISPOSITIF À SEMICONDUCTEUR

Publication
EP 3985749 B1 20230816 (EN)

Application
EP 20209712 A 20201125

Priority
CN 202011088594 A 20201013

Abstract (en)
[origin: EP3985749A1] A semiconductor device includes a substrate, a first dielectric layer, a second dielectric layer, and a third dielectric layer. The first dielectric layer is disposed on the substrate, around a first metal interconnection. The second dielectric layer is disposed on the first dielectric layer, around a via and a second metal interconnection. The second metal interconnection directly contacts the first metal interconnection. The third dielectric layer is disposed on the second dielectric layer, around a first magnetic tunneling junction (MTJ) structure and a third metal interconnection. The third metal interconnection directly contacts the first MTJ structure and the second metal interconnection, and the first MTJ structure directly contacts the via.

IPC 8 full level
H10N 50/10 (2023.01); **H10N 50/80** (2023.01); **H10N 59/00** (2023.01)

CPC (source: EP US)
G11C 11/161 (2013.01 - EP); **H10B 61/00** (2023.02 - EP); **H10B 61/22** (2023.02 - US); **H10N 50/10** (2023.02 - EP US); **H10N 50/80** (2023.02 - US); **H10N 50/85** (2023.02 - US)

Designated contracting state (EPC)
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